

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) At a server system that is to poll, a method of enhancing performance monitoring for a server system by reducing polling time through the reduction in the number of queries generated to monitor the performance of a plurality of various services provided by the monitored server system, the method comprising:

the step of generating a single query requesting a compilation of information about the performance of a plurality of different services offered by a monitored server system;

the step of transmitting the single query from the polling server system to the monitored server system; and

the step of receiving one reply that includes the compilation of information about the performance of the plurality of the different services offered by the monitored server system, without receiving the information about the performance of the plurality of the different services in a piecemeal fashion;

the step of using the compilation to update at least a first and a second server system lists with information on the monitored server system, wherein server systems included within the first server system list are polled more frequently than server systems included within the second server system list.

2. (Original) The method of Claim 1, further comprising:

the step of, at the polling server system, receiving from a client system a request for at least some of the information contained in the compilation; and

the step of transmitting the at least some of the information contained in the compilation from the polling server system to the client system in response to the request.

3. (Original) The method of Claim 1, further comprising:

the step of automatically transmitting at least some of the information contained in the compilation from the polling server system to a client system.

4. (Original) The method of Claim 1, wherein the compilation comprises a status of network services of the monitored server system.

5. (Original) The method of Claim 4, wherein the network services comprise a directory service.

6. (Original) The method of Claim 4, wherein the network services comprise a message store service.

7. (Original) The method of Claim 4, wherein the network services comprise a message transfer agent.

8. (Original) The method of Claim 4, wherein the network services comprise a facsimile communications service.

9. (Original) The method of Claim 4, wherein the network services comprise an Internet communications service.

10. (Original) The method of Claim 4, wherein the network services comprise a messaging service.

11. (Original) The method of claim 10, further comprising:
the step of, at the monitored server system, automatically attempting to establish a working connection to a mailbox in the messaging service;
the step of, at the monitored server system, determining whether the working connection is established; and
the step of reporting the result of the step of determining in the compilation.

12. (Original) The method of claim 11, further comprising:

the step of, depending on the result of the step of determining, automatically attempting to determine whether a message is available at the mailbox; and

the step of, depending on the result of the step of determining whether the working connection is established, automatically reporting in the compilation the result of the step of determining whether a message is available at the mailbox.

13. (Original) The method of claim 12, further comprising:

the step of, depending on the result of the step of automatically attempting to determine whether a message is available at the mailbox, attempting to read the message; and

the step of, depending on the result of the step of automatically attempting to determine whether a message is available at the mailbox, reporting in the compilation the result of the step of attempting to read the message.

14. (Original) The method of claim 11, wherein the result of the step of automatically attempting to establish a working connection depends on the messaging services' acceptance of a security code.

15. (Original) The method of claim 11, wherein the step of automatically attempting to establish a working connection is driven by a detection of a failure in the messaging service.

16. (Original) The method of claim 11, wherein the method further comprises the step of exercising a software service used in the establishment of a user's working connection.

17. (Original) The method of claim 16, wherein the software service comprises a buffer service.

18. (Original) The method of claim 1, further comprising:

the step of, at the polling server system, installing polling software capable of performing the step of transmitting the single query from the polling server system to the monitored server system; and

the step of, at the monitored server system, installing attendant software capable of generating the compilation of information about the performance of the plurality of services offered by the monitored server system.

19. (Original) The method of claim 18, further comprising:

the step of the attendant software monitoring a time indicator at the monitored server system; and

the step of the attendant software including a time indication based at the monitored server system with the compilation.

20. (Original) The method as defined in claim 19, further comprising:

the step of the polling software monitoring a master time indicator at the polling server system to determine a master time indication; and

the step of comparing the time indication in the compilation with the master time indication of the polling server system.

21. (Original) The method of claim 20, further comprising:

the step of, if the difference between the time indication in the compilation and the master time indication exceeds a maximum permissible difference, the polling software at the polling server system causing the time indicator at the monitored server system to be updated to more accurately match the master time indication at the polling server system.

22. (Original) The method of claim 1, further comprising the step of, at the monitored server system, generating the compilation of information about the performance of the plurality of services offered by the monitored server system.

23. (Canceled)

24. (Currently Amended) The method of claim ~~23~~1, wherein the step of using the compilation to update at least one server system list comprises:

the step of listing the monitored server system in a normal server system list if the compilation does not indicate any deficiencies in the monitored server system; and

the step of listing the monitored server system in a critical server system list if the compilation indicates deficiencies in the monitored server system, wherein the first server systems list is the critical server system list and the second server system list is the normal server system list.

25. (Currently Amended) The method of claim 23~~24~~, wherein the compilation is a current compilation, wherein the step of using the compilation to update at least one server system list comprises

the step of transferring the monitored server system from a~~the~~ normal server system list to a~~the~~ critical server system list if a previous compilation indicated no deficiencies in the monitored server system, but ~~the a~~ current compilation indicates a deficiency in the monitored server system.

26. (Currently Amended) The method of claim 25, wherein the step of transferring the monitored server system from a~~the~~ normal server system list to a~~the~~ critical server system list is caused by a polling software settings set in the polling server system by a system administrator.

27. (Currently Amended) The method of claim 23~~24~~, wherein the compilation is a current compilation, wherein the step of using the compilation to update at least one server system lists comprises the step of transferring the monitored server system from a~~the~~ critical server system list to a~~the~~ normal server system list if a previous compilation indicated deficiencies in the monitored server system, but the current compilation indicates no deficiencies in the monitored server system.

28. (Original) The method of claim 27, wherein the step of transferring the monitored server system from a critical server system list to a normal server system list is caused by a setting of polling software set in the polling server system by a system administrator.

29. (Canceled)

30. (Currently Amended) At a server system that is to be monitored, a method of enhancing performance monitoring for a server system by reducing polling time through the reduction in the number of queries generated to monitor the performance of a plurality of various services provided by the monitored server system, the method comprising:

the step of receiving a single query from a server system that is to poll, wherein the signal single query requests a compilation of information about the performance of a plurality of different services offered by the monitored server system;

the step of determining the plurality of different services that information about the performance thereof is requested;

the step of generating one reply that includes the compilation of information about the performance of the plurality of the different services offered by the monitored server system, wherein the compilation indicates that at least a first of the plurality of different services has one or more performance deficiencies; and

the step of transmitting the compilation from the monitored server system to the polling server system, without transmitting the information about the performance of the plurality of the different services in a piecemeal fashion; and

based on the indication that the at least one of the plurality of different services has one or more performance deficiencies, the step of receiving with increased frequency polling requests for information about the performance deficiencies for the at least one of the plurality of different services.

31. (Currently Amended) At a server system that is to poll, a computer-readable medium for implementing a method of enhancing performance monitoring for a server system by reducing polling time through the reduction in the number of queries generated to monitor the performance of a plurality of various services provided by the monitored server system, the computer-readable medium having stored thereon computer-executable instructions for performing the following:

the step of generating a single query requesting a compilation of information about the performance of a plurality of different services offered by a server system that is to be monitored;

the step of transmitting the single query from the polling server system to the monitored server system; and

the step of, at the polling server system, receiving one reply that includes the compilation of information about the performance of the plurality of the different services offered by the monitored server system, without receiving the information about the performance of the plurality of the different service in a piecemeal fashion; and

the step of using the compilation of information to update at least a first and a second server system lists with information on the monitored server system, wherein server systems included within the first server system list are polled more frequently than server systems included within the second server system list.

32. (Cancelled)

33. (Currently Amended) At a computer system that is to be monitored, a computer-readable medium for implementing a method of enhancing performance monitoring for a server system by reducing polling time through the reduction in the number of queries generated to monitor the performance of a plurality of various services provided by the monitored server system, the computer-readable medium having stored thereon computer-executable instructions for performing the following:

the step of receiving a single query from a server system that is to poll, wherein the signal single query requests a compilation of information about the performance of a plurality of different services offered by the monitored server system;

the step of determining the plurality of different services that information about the performance thereof is requested;

the step of generating on reply that includes the compilation of information about the performance of the plurality of the different services offered by the monitored server system wherein the compilation indicates that at least a first of the plurality of different services has one or more performance deficiencies; and

the step of transmitting the compilation from the monitored server system to the polling server system, without transmitting the information about the performance of the plurality of the different services in a piecemeal fashion; and

based on the indication that the at least one of the plurality of different services has one or more performance deficiencies, the step of receiving with increased frequency polling requests for information about the performance deficiencies for the at least one of the plurality of different services.

34. (Currently Amended) The computer-readable medium of claim 33, wherein the computer-executable instructions for performing the step of generating the compilation of information are for performing the following:

the step of automatically attempting to establish a working connection to a mailbox in a messaging system of the monitored server system;

the step of determining whether the working connection is established; and

the step of including the result of the attempt in the compilation, wherein the one or more performance deficiencies is directed toward the working connection to the mailbox.

35. (Original) The computer-readable medium of claim 34, wherein the computer-executable instructions for performing the step of generating the compilation of information are further for performing the following:

the step of, depending on the result of the step of determining whether the working connection is established, automatically attempting to determine whether a message is available at the mailbox; and

the step of, depending on the result of the step of determining whether the working connection is established, including the result of the step of automatically attempting to determine whether a message is available at the mailbox in the compilation.

36. (Original) The computer-readable medium of claim 35, wherein the computer-executable instructions for performing the step of generating the compilation of information are further for performing the following:

the step of, depending on the result of the step of automatically attempting to determine whether a message is available, attempting to read the message; and

the step of, depending on the result of the step of automatically attempting to determine whether a message is available, including the result of the step of attempting to read the message in the compilation.

37. (Previously Presented) At a server system that is to poll, a method of enhancing performance monitoring for a server system by reducing polling time through the reduction in the number of queries generated to monitor the performance of a plurality of various services provided by the monitored server system, the method comprising:

the act of generating a single query requesting a compilation of information about the performance of a plurality of different services offered by a monitored server system, wherein the single query is generated using polling software installed on the polling server system, wherein the polling server system is connected to the monitored server system over a network;

the act of transmitting the single query from the polling server system to the monitored server system over the network;

the act of receiving one reply that includes the compilation of information about the performance of the plurality of the different services offered by the monitored server system, without receiving the information about the performance of the plurality of the different services in a piecemeal fashion;

the act of determining if the compilation indicates any deficiencies in one or more of the plurality of the different service; and

based on the act of determining, using the compilation to update either a normal server system list or a critical server system list with information on the monitored server system, wherein server systems included within the critical server system list are polled more frequently than server systems in the normal server system list.

38. (Previously Presented) The method of claim 30, wherein the different services that are determined are based on a pre-selected group of different services set by an administrator for the monitored server system.